BIOLOGICAL RESULTS OF LAST CRUISE OF CARNEGIE

IV

THE MYSIDS

W. M. TATTERSALL

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THE MYSIDS

INTRODUCTION

The Mysidacea from the plankton hauls made by the Carnegie during the world cruise which, unfortunately, had such a tragic termination in the harbor of Apia, Western Samoa, in November 1929, were kindly submitted to me for examination. The author is greatly indebted to Dr. J. A. Fleming, Director of the Department of Terrestrial Magnetism, for the privilege of reporting on this collection. It was not rich in species, nor in individuals, with the exception of Siriella thompsonii, but contained examples of interesting and rare species. Fifteen species are represented altogether, two of which are new to science. One of these is a new species of the genus Anchialina, and the other a single specimen of a very curious and anomalous form, whose affinities are for the moment obscure in the absence of male specimens. The author has associated it with the ill-fated vessel to which we owe its capture, in a new genus, Carnegieomysis.

The geographical range of most of the species has been extended by the work of the Carnegie. The author has indicated under each species the known geographical range, and the additions made to it by the present records.

ORDER MYSIDACEA

Suborder MYSIDA

FAMILY MYSIDAE DANA

Subfamily SIRIELLINAE, Norman

Genus SIRIELLA, Dana

Siriella thompsonii (Milne-Edwards)

OCCURRENCE

Station	Latitude	Longitude	Depth	Date	Sample
			Atlantic Ocean		
	° ′	° ′		1928	
1- 2	37 00 N	60 00 W	Surface	May 14	One male and one female
2	37 45 N	53 26 W	Surface	May 16	One female
18	29 47 N	40 36 W	Surface	Aug.17	Ten juvenile
20-21	16 01 N	37 52 W	Surface	Aug.23	One juvenile
22	13 25 N	38 00 W	100 m	Aug.27	One juvenile
24	08 15 N	36 10 W	Surface	Aug.31	One juvenile
24	08 15 N	36 10 W	100 m	Aug.31	One female, with eggs in the brood pouch
29	13 16 N	52 13 W	50 m	Sep. 13	One female, with eggs in the brood pouch
30	12 54 N	56 15 W	Surface	Sep. 15	One juvenile
			Pacific Ocean		
35-36	05 22 N	79 59 W	Surface	Oct. 27	One adult male, two immature
44	03 15 S	99 48 W	Surface	Nov.17	One female with young in the brood pouch
49-50	26 27 S	115 21 W	Surface	Nov.28	Four adult males, three adult females with young in the brood pouch, and four immature
50-51	28 38 S	114 59 W	Surface	Nov.30	One adult female with young in the brood pouch, three immature females, four immature females, and thirteen juveniles
50-51	28 38 S	114 59 W	Surface	Nov.30	Three immature females, two immature males and two juvenile
50-51	28 45 S	114 55 W	Surface	Nov.30	One adult female with young in the brood pouch, two immature females, one immature male, and six juvenile
56	31 49 S	109 04 W	Surface	Dec.18	One juvenile
61-62	37 34 S	93 35 W	Surface	Dec.28	One adult and one immature male, one immature female
62-63	32 25 S	89 49 W	Surface	Dec.31	One juvenile
62-63	32 23 S	89 42 W	Surface	Dec.31	Three adult and three immature males, five adult and two immature females, five juvenile

Sirlella thompsonii (Milne-Edwards)--Concluded

Station	Latitude	Longitude	Depth	Date	Sample
			Pacific Ocean--Concluded		
	° ′	° ′		1929	
63- 64	32 05 S	88 58 W	Surface	Jan. 1	One immature female and two juvenile
63- 64	32 03 S	88 55 W	Surface	Jan. 1	One adult male and eleven juvenile
63- 64	32 01 S	88 54 W	Surface	Jan. 2	One adult female and three juvenile
63- 64	32 00 S	88 52 W	Surface	Jan. 2	One adult and one immature males, two adult females, and one juvenile
63- 64	31 58 S	88 50 W	Surface	Jan. 2	One adult female and one juvenile
63- 64	31 50 S	88 22 W	Surface	Jan. 2	One adult and two immature males, four adult and two immature females, and twenty-nine juvenile
63- 64	31 51 S	88 21 W	Surface	Jan. 3	One adult female and seven juvenile
63- 64	31 52 S	88 20 W	Surface	Jan. 3	One adult male and twelve juvenile
63- 64	31 54 S	88 18 W	Surface	Jan. 3	One adult female
64	31 54 S	88 17 W	Surface	Jan. 3	Six juvenile
64	31 54 S	88 17 W	1000 m	Jan. 3	One juvenile
64- 65	31 52 S	87 51 W	Surface	Jan. 3	About two hundred and fifty specimens, including adults, and immature and juvenile specimens of both sexes
64- 65	31 52 S	87 46 W	Surface	Jan. 4	Five adult males, five adult females, and thirty-one juvenile
64- 65	31 52 S	87 42 W	Surface	Jan. 4	Four adult males, four adult females, and forty-three juvenile
64- 65	31 31 S	86 57 W	Surface	Jan. 4	About fifty specimens including adults and juveniles of both sexes
68	21 28 S	80 26 W	Surface	Jan. 10	One adult female
77	14 20 S	103 12 W	Surface	Feb.18	One immature female
80	12 39 S	117 22 W	Surface	Feb.24	Seven juvenile
84	17 11 S	133 18 W	50 m	Mar. 4	One juvenile
89- 90	17 04 S	152 58 W	Surface	Mar.23	Nine juvenile
96	06 47 S	172 23 W	Surface	Apr.26	One juvenile
101	13 23 N	177 27 E	100 m	May 7	One adult and one immature male
106	16 14 N	151 04 E	50 m	May 17	One adult male
108	18 26 N	144 01 E	Surface	May 27	One juvenile
131	33 49 N	126 20 W	Surface	Sep. 6	One juvenile
132	31 38 N	128 48 W	100 m	Sep. 8	One immature female
133	29 21 N	132 30 W	Surface	Sep. 10	Three juvenile
134	27 45 N	135 22 W	Surface	Sep. 12	Three juvenile
134-135	26 44 N	138 27 W	Surface	Sep. 13	One adult female
134-135	26 44 N	138 27 W	Surface	Sep. 13	One adult female
136	26 13 N	142 02 W	Surface	Sep. 16	One juvenile
138	22 53 N	151 15 W	50 m	Sep. 20	One immature male
140	23 26 N	159 27 W	50 m	Oct. 3	One juvenile
141	29 02 N	161 11 W	50 m	Oct. 5	One adult male and one adult female
142	32 42 N	160 44 W	Surface	Oct. 7	Two juvenile
142	32 42 N	160 44 W	100 m	Oct. 7	One adult and one immature males, one adult and one immature females
144	33 38 N	151 47 W	Surface	Oct. 11	One adult female and one immature male
145	33 27 N	145 30 W	Surface	Oct. 13	One immature male
146	31 51 N	140 50 W	Surface	Oct. 15	One adult female
147	27 27 N	138 14 W	Surface	Oct. 17	One juvenile
147	27 27 N	138 14 W	Surface	Oct. 17	One juvenile

RESULTS

These records definitely establish the fact that this species is a pelagic, surface, oceanic, and mainly tropical form. In both the Atlantic and Pacific oceans it was not captured at any station north of latitude 40° north. There were no stations south of latitude 40° south in either ocean. It was particularly abundant between latitudes 20° to 40° south and longitudes 80° to 100° west. It was never taken in any of the townet hauls made in any of the harbors and anchorages in the islands of the Pacific, but always in the open sea away from land. Of the above records, forty-eight (or eighty per cent) were from surface hauls, six from 50 m, five from 100 m, and one only from 1000 m (the specimen, a very young one, in all probability caught as the net was hauled to the surface). These facts clearly show that S. thompsonii frequents the upper 100 m of water and is mainly a surface form.

Siriella gracilis, Dana

OCCURRENCE

Station	Latitude	Longitude	Depth	Date	Sample
	° ′	° ′		1928	
35- 36	05 22 N	79 59 W	Surface	Oct. 27	One adult male and nine juvenile
35- 36	04 16 N	79 47 W	Surface	Oct. 28	One adult male and seven juvenile
37	05 59 N	82 56 W	50 m	Nov. 1	One juvenile
				1929	
141	29 02 N	161 11 W	50 m	Oct. 5	One juvenile
156	03 01 N	149 48 W	50 m	Nov. 4	One juvenile

REMARKS

It is interesting to note that no specimens of this species occurred in the townet hauls made in the Atlantic Ocean. This is in accordance with previous records of its distribution.

Siriella nodosa, H. J. Hansen

S. nodosa, Hansen, 1910
S. nodosa, Colosi, 1918
S. nodosa, Colosi, 1920

OCCURRENCE

Moored in Guam Harbor, May 1929, surface townet, 8.10 to 9.50 p.m., light in net mouth, one female.

DISTRIBUTION

Hansen records this species from the Karkaralong group of islands in the East Indian Archipelago, and Colosi from the Torres Straits. The present station is 20° east of the Philippines.

Siriella vulgaris, H. J. Hansen

S. vulgaris, Hansen, 1910
S. vulgaris, Tattersall, 1922
S. vulgaris, Colosi, 1924
S. vulgaris, Tattersall, 1928

OCCURRENCE

Region of Samoa, April 1929, surface, two males and two females. Moored in Guam Harbor, May 1929, surface townet, 8.10 to 9.50 p.m., light in net mouth, four males and one female.

DISTRIBUTION

The records of Hansen and Tattersall show that this species is an inshore shallow-water form, found only in the neighborhood of land. It has been recorded from numerous stations in the East Indian Archipelago, Port Blair in the Andaman Islands, and Flinders Island, North Queensland. Colosi (1924) records the species from the Arabian Sea without more precise definition of the locality. The species is obviously widely distributed in the tropical parts of the Indian and Pacific oceans, in suitable shallow-water localities.

Siriella media, H. J. Hansen

S. media, Hansen, 1910
S. media, Hansen, 1912

OCCURRENCE

Moored in Guam Harbor, May 1929, surface townet, 8.10 to 9.50 p.m., light in net mouth, four males and two females.

DISTRIBUTION

Hitherto known only from the East Indian Archipelago and the Gilbert Islands. The present record, therefore, represents a considerable easterly and northerly extension of its known range.

Siriella aequiremis, H. J. Hansen

S. aequiremis, Hansen, 1910
S. aequiremis, Tattersall, 1911
S. aequiremis, Hansen, 1912
S. aequiremis, Colosi, 1918
S. aequiremis, Colosi, 1920

OCCURRENCE

Between stations 35 and 36, latitude 05° 22′ north, longitude 79° 59′ west, surface, October 27, 1928, one immature male. Moored in Guam Harbor, May 1929, surface townet, 8.10 to 9.50 p.m., light in net mouth, six immature females.

REMARKS

No adult males are present in the collection. The immature male from the first station noted above shows the characteristic coloration of the species mentioned by Hansen (1910), "abdomen with black lateral spots."

DISTRIBUTION

The records of Hansen, Tattersall, and Colosi show this species to be widely distributed throughout the whole of the tropical parts of the Indian and Pacific oceans, from the neighborhood of the Amirante Islands in the western part of the Indian Ocean to stations off the coast of Mexico and the Panama Isthmus. Like S. thompsonii and S. gracilis, it is often an oceanic form, but is also found nearer to land and even in the harbors of the Pacific Islands.

Siriella distinguenda, H. J. Hansen

S. distinguenda, Hansen, 1910

OCCURRENCE

Region of Samoa, April 1929, surface, thirty adults of both sexes.

DISTRIBUTION

This species has only been recorded once previously, by Hansen, from three stations in the East Indian Archipelago. The present record, therefore, indicates a considerable extension eastward of its known distribution. It would appear to be a shallow-water and harbor species.

Genus **HEMISIRIELLA**, Hansen, 1910

Hemisiriella pulchra, H. J. Hansen

H. pulchra, Hansen, 1910

OCCURRENCE

Region of Samoa, April 1929, surface, one male and fourteen females.

Moored in Guam Harbor, May 1929, surface townet, 8.10 to 9.50 p.m., light in net mouth, one female.

DISTRIBUTION

This species has only been recorded once before, namely by Hansen from six stations in the East Indian Archipelago.

Hemisiriella parva, H. J. Hansen

H. parva, Hansen, 1910
H. parva, Colosi, 1918 and 1920
H. parva, Zimmer, 1918
H. parva, Tattersall, 1922

OCCURRENCE

Station 95, latitude 08° 43′ south, longitude 170° 56′ west, 100 m, April 24, 1929, one immature male.

Station 100, latitude 08° 05′ north, longitude 178° 48′ west, 50m, May 4, 1929, one immature male.

DISTRIBUTION

This species has been recorded from four stations in the East Indian Archipelago (Hansen, 1910), Bay of Bengal (Hansen, 1910), Java (Zimmer, 1918), Indian Ocean (Colosi, 1918 and 1920) and the Andaman Islands (Tattersall, 1922). The present records, therefore, extend its known range considerably eastward.

Subfamily GASTROSACCINAE, Norman

Genus ANCHIALINA, Norman and Scott

Anchialina flemingi, n. sp.

OCCURRENCE

Between stations 89 and 90, latitude 17° 04′ south, longitude 152° 58′ west, surface, March 23, 1929, one adult male.

Region of Samoa, April 1929, surface, two immature specimens.

DESCRIPTION

Carapace, in the male, produced into a long triangular, acutely pointed rostral plate extending forward as far as the distal margin of the first joint of the antennular peduncle (fig. 1a, p. 72).

Eyes small, about as broad as the antennular peduncle, pigment light brown.

Antennular peduncle stout, third joint longer than the second.

Antennal scale (fig. 2a, p. 72) small, not extending very much beyond the distal end of the first joint of the antennular peduncle and shorter than the second joint of the antennal peduncle; twice as long as broad; outer margin entire, terminating in a short spine beyond which the setose part of the scale is prolonged for about one quarter of its length; terminal joint distinctly articulated; antennal peduncle with the second joint large and stout, longer than the antennal scale, and about twice as long as broad.

First thoracic limbs (fig. 3a, p. 72) with the endopod very stout, nail very long and stout, longer than the sixth joint.

Second thoracic limbs (fig. 3b, p. 72) with the second joint of the endopod massive, fifth joint expanded on its inner margin to form almost a right-angled projection, the margin between the projection and the sixth joint with six or seven minute teeth; sixth joint not expanded; nail long.

Pseudobranchial lamellae of the male pleopods not bilobed, more or less triangular in shape with the inner angle broadly rounded, outer angle more narrowly rounded and armed with a single seta.

Exopod of the third pair of pleopods of the male (fig. 3c, p. 72) at least one and a half times as long as the endopod, nine-jointed, each joint with a seta on both the inner and outer corner; last four setae on the outer margin and the last three on the inner margin modified, much shorter and stouter than the other setae, with minutely hooked tips.

Sixth segment of the abdomen one and a half times as long as the fifth.

Telson (fig. 1b, p. 72) longer than the sixth segment of the abdomen, three times as long as broad at the base; cleft one sixth of the length of the telson in depth, and armed on both margins with a closely set row of saw-like teeth; lateral margins armed throughout their length with about thirty-three spines arranged in groups

of twos and threes, particularly toward the distal end; terminal lobes of the telson armed with a single spine, longer and stouter than any of the spines on the lateral margins.

Endopod of the uropods (fig. 2b, p. 72) longer than the telson; inner margin armed for at least four-fifths of its length with a closely set row of spines, arranged in groups of three or four smaller spines between much larger spines; there are about seventeen of the larger spines, the distal two of which are much longer and stouter than the others and have no smaller spines between them.

Exopod of the uropods (fig. 2b, p. 72) a little shorter and broader than the endopod, outer margin armed with about twenty-three spines, gradually increasing in size toward the distal end of the margin and not arranged in groups.

Length of an adult male, 6 mm.

REMARKS

This species is distinguished from **A. typica**, Kr,, and **A. truncata**, Sars, by the produced and pointed rostral plate. It differs, also, from **A. obtusifrons**, Hansen, in having the rostral plate acutely pointed and not obtusely rounded. In the character of the rostral plate, it agrees with **A. agills**, Sars. **A, grossa**, Hansen, and **A. penicillata**, Zimmer. From the last two species it is distinguished by the form of the second thoracic limb of the male, which is without the blunt process on the inner margin of the fifth joint characteristic of **A. grossa** and **A. penicillata**. It also differs from these two species in the much simpler and more normal exopod of the third pleopod of the male. It is most closely allied to **A. agilis**, Sars, and differs from it in the slightly different form of the endopod of the second thoracic limb of the male and in the details of the exopod of the third male pleopod. No females occurred in the collection and the male type lacked all the endopods of the third to the eighth thoracic limbs.

The author takes pleasure in associating this species with the name of the Director of the Department of Terrestrial Magnetism, Carnegie Institution of Washington, under whose auspices the **Carnegie** set out on her last voyage of exploratory work.

Subfamily MYSINAE

Tribe ERYTHROPINI

Genus EUCHAETOMERA, G. O. Sars

Euchaetomera glyphidophthalmica, Illig. ?

E. glyphidophthalmica, Illig, 1906
E. glyphidophthalmica, Zimmer, 1914 and 1915
E. glyphidophthalmica, Colosi, 1929
E. glyphidophthalmica, Illig, 1930

OCCURRENCE

Station 28, latitude 13° 10′ north, longitude 49° 36′ west, 50 m, September 11, 1928, one immature male.

DISTRIBUTION

This species is known principally by the records of Zimmer (1914) and Illig (1930) from the tropical parts of the Atlantic Ocean. It has been recorded doubtfully from the Mediterranean by Zimmer (1915) and Colosi (1929). The present record does not extend its known geographical range appreciably.

Euchaetomera plebeja, H. J. Hansen

E. plebeja, Hansen, 1912

OCCURRENCE

Station 36, latitude 02° 54′ north, longitude 80° 02′ west, 100 m, October 30, 1928, one adult male.

Station 66, latitude 27° 04′ south, longitude 84° 01′ west, 100 m, January 7, 1929, one immature male.

DISTRIBUTION

This species has only been recorded once previously, by Hansen (1912) from two stations in the Eastern Pacific. The present records are also from the Eastern Pacific and extend the southern range of the species somewhat, but not beyond the purely tropical regions of these waters.

Genus EUCHAETOMEROPSIS, Tattersall

Euchaetomeropsis merolepis (Illig)

Euchaetomera merolepis, Illig, 1908
Euchaetomeropsis merolepis, Tattersall, 1909
Euchaetomeropsis merolepis, Zimmer, 1914
Euchaetomeropsis merolepis, Colosi, 1929
Euchaetomeropsis merolepis, Illig, 1930

OCCURRENCE

Station 128, latitude 40° 37′ north, longitude 132° 23′ west, 100 m, July 25, 1929, one immature male.

DISTRIBUTION

This species has been previously recorded from the Gulf of Guinea and four stations in the Indian Ocean (Illig, 1908 and 1930), the Mediterranean (Tattersall, 1909 and Colosi, 1929), and the South Atlantic (Zimmer, 1914). The present record is the first one from the Pacific Ocean and extends the known geographical range of the species by the full extent of that ocean.

Tribe LEPTOMYSINI

Genus DOXOMYSIS, Hansen, 1912

Doxomysis quadrispinosa (Illig)

Mysis quadrispinosa, Illig, 1906
Mysis quadrispinosa, Tattersall, 1911
Doxomysis pelagica, Hansen, 1912
Doxomysis tattersalli, Colosi, 1920
Doxomysis quadrispinosa, Illig, 1930

OCCURRENCE

Station 38, latitude 03° 46′ north, longitude 81° 37′ west, 50 m, November 3, 1928, one adult male.

DISTRIBUTION

This species is known from the tropical part of the Indian Ocean (Illig and Tattersall) and from the Eastern Pacific (Hansen and Colosi). The present specimens are from the same waters as the latter records.

Doxomysis sp. ?

OCCURRENCE

Station 99, latitude 04° 22′ north, longitude 176° 23′ west, 50 m, May 2, 1929, one damaged specimen.

REMARKS

This specimen is too damaged to identify with certainty. Like D. quadrispinosa it has the abdomen spinulose and it may be a mutilated example of this species.

INCERTAE CEDIS

Genus CARNEGIEOMYSIS, nov.

DEFINITION

General form robust and gibbous, abdomen flexed. Carapace large, covering the whole of the thorax in dorsal view, produced laterally and posteriorly to cover the whole of the first and half of the second abdominal somites, produced anteriorly into a large triangular rostral plate with a blunt apex, which partially covers the eyes. Eyes very large, pyriform in shape in lateral view, the cornea divided by a distinct groove into a larger ventral part with smaller facets and a smaller dorsal part with larger facets. Antennal scale rather short and narrow, setose all round, with a distal part marked off by a distinct suture. Thoracic limbs with the endopods rather slender, that of the first thoracic limbs with a feeble masticatory lobe on the second joint only, those of the third to the eighth thoracic limbs with the sixth joint undivided. Telson short, entire, spatulate in shape, apex armed with a few short stout spines, lateral margins with a few spines distally.

Type-Carnegieomysis xenops, n. sp.

REMARKS

The systematic position of this genus must remain uncertain until male specimens are available for examination. The author anticipates that it will prove to belong to the Tribe Mysini, near to such genera as Anisomysis, Idiomysis, and Lycomysis. It is a curious and anomalous genus, recalling Idiomysis in its gibbous form and abdominal flexure, but sharply distinguished from all mysids known to the author by the large pyriform eyes divided into dorsal and ventral parts by a groove. The eyes resemble, in a general way, the eyes of some of the Euphausiacea, such as Thysanoëssa and Nematoscelis. For the rest, the rather feeble and slender endopods of the thoracic limbs, the undivided sixth joint of the endopods of the third to the eighth thoracic limbs, and the entire telson, together provide additional distinguishing features by which the genus may be recognized. The author is glad to associate this distinct form with the name of the vessel to whose researches its capture is due.

Carnegieomysis xenops, gen. and n. sp.

OCCURRENCE

Station 148, latitude 24° 57′ north, longitude 137° 44′ west, 100 m, October 19, 1929, one adult female.

DESCRIPTION

General form (fig. 4, p. 72) gibbous with the abdomen flexed ventrally; lateral parts of the abdominal somites covered with very small spinules; similar spinules scattered over other parts of the body, particularly on the anterior end of the carapace.

Carapace relatively large, covering all the somites of the thorax dorsally and produced laterally into a well-marked wing partially covering the anterior abdominal somites laterally; produced anteriorly into a broad bluntly pointed rostral plate forming a hood partially covering the large eyes dorsally and extending forward to the level of the front of the eyes.

Eyes (fig. 4, p. 72) very large, brown in color, pyriform in shape viewed laterally, divided into a small dorsal part with larger corneal facets and a large ventral part with smaller facets, the two parts separated by a groove broader posteriorly than anteriorly, and devoid of facets and therefore of pigment. The cornea appears to be pushed in as a more or less circular depression in the region of the groove, the depression affecting the lower part of the dorsal section and the upper part of the ventral section of the eye.

Antennular peduncle with the second joint having a well-developed, recurved finger-like process dorsally, the process with two or three small setae at the apex.

Antennal scale (fig. 5a, p. 72) small and narrow, barely extending beyond the antennular peduncle, eight times as long as broad, a small distal segment marked off by a distinct suture, setose all round.

Thoracic limbs. The general form and structure of these limbs can best be seen from the figures (figs. 5b-c, p. 72). The first thoracic limb (fig. 5b, p. 72) has a small masticatory lobe on the second joint of the endopod but none on the other joints. In the third to the eighth pairs the sixth joint of the endopod is undivided and armed with rather long plumose setae on the inner margin. The nail is well developed in all the endopods of the thoracic limbs. The basal joint of the exopod is moderately expanded and has the outer distal corner rounded, without a spine.

Abdominal somites. The sixth abdominal somite is more than twice as long as the fifth.

Telson (fig. 5f, p. 72) a little shorter than the sixth abdominal somite and narrower than this somite at the base; about twice as long as broad at its base; lateral margins rather abruptly narrowing for more than half the length of the telson and then diverging slightly to form a spatulate distal part of the telson, ending in a broadly rounded entire apex; the apex armed with five quite short, rather stout spines more or less equidistantly placed; lateral margins armed with three short spines about the center of the margin just anterior to the narrowest part of the telson.

Uropods about twice as long as the telson; inner and outer uropods equal in length; inner uropod without any

outer uropods equal in length; inner uropod without any spines on the lower and inner margins.

Length of the type and only specimen, a female, 3 mm.

REMARKS

The exact systematic position of this species must remain uncertain until male specimens are available for examination as to the form of the pleopods. The author thinks, from a comparison with known forms, that the species will eventually find a place in the Tribe Mysini, near to such pelagic genera as Anisomysis, Cryptomysis, and Idiomysis. The most striking feature of the species is the quite peculiar and unique character of the eyes. The latter resemble, in a superficial manner at any rate, the eyes of some of the Euphausians, such as Nematoscelis, Thysanoëssa, or Stylocheiron, in having the cornea divided into distinct dorsal and ventral parts. In Carnegieomysis, however, the two parts are separated by a groove in which corneal elements are absent. It is a type of eye which is developed in response to a pelagic habit of life and is probably closely similar in general structure, though even more developed than, the eye of Euchaetomera and allied genera. There is no other mysid with which it can be confused in the character of the eyes. Apart from the eyes, the most outstanding characters are the form and size of the antennal scale, and the shape and armature of the telson.

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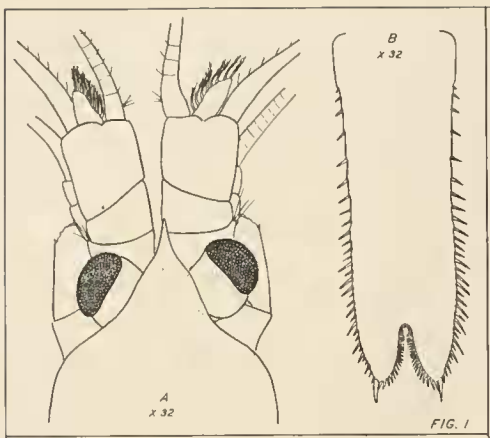
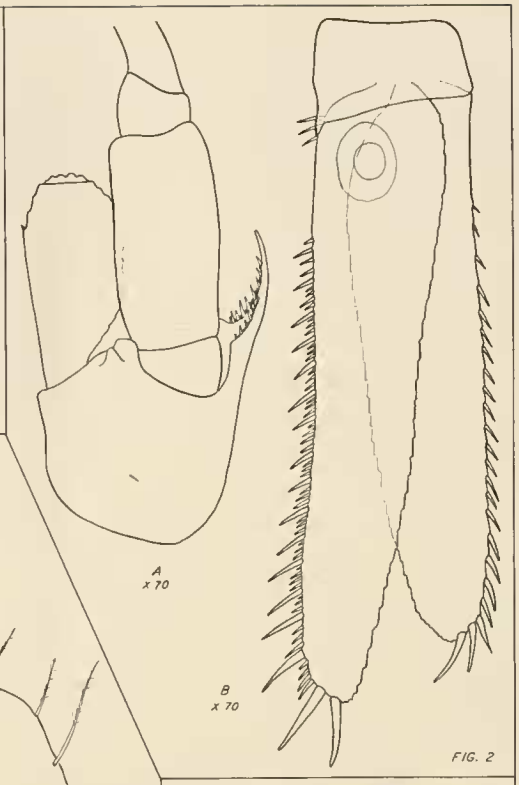
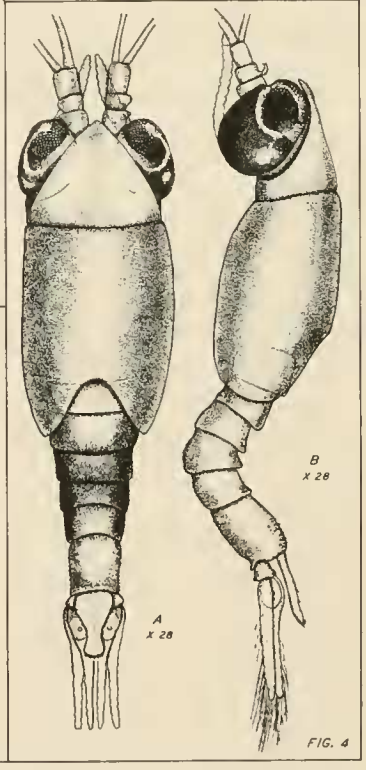
_____ 1918. Neue und wenig bekannte Mysidaceen des Berliner Zoologischen Museums. Mitt. Zool. Mus., Berlin, vol. 9, no. 1, pp. 13-26.

FIGURES 1 - 5







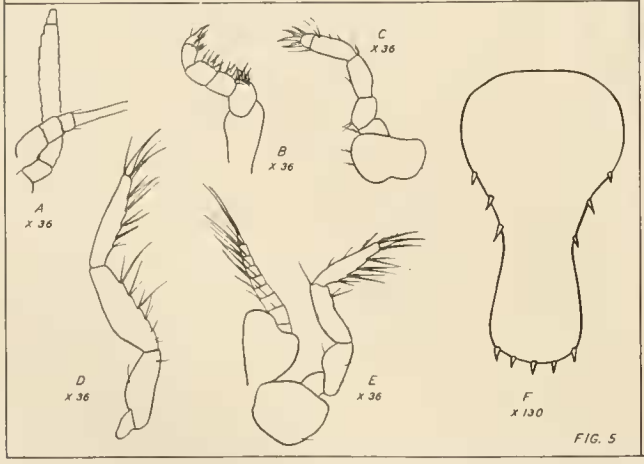


FIG. 1—ANCHIALINA FLEMINGI, N. SP. A, ANTERIOR END OF A MALE; B, TELSON. MAGNIFICATION: X 32

FIG. 2—ANCHIALINA FLEMINGI, N. SP. A, ANTENNAL SCALE AND PEDUNCLE; B, UROPODS. MAGNIFICATION: X 70

FIG. 3—ANCHIALINA FLEMINGI, N. SP. A, ENDOPOD OF FIRST THORACIC LIMB; B, ENDOPOD OF SECOND THORACIC LIMB OF MALE; C, EXOPOD OF THIRD PLEOPOD OF MALE. MAGNIFICATION: X 70

FIG. 4—CARNEGIEOMYSIS XENOPS, N. GEN. AND N. SP. A, FEMALE DORSAL VIEW; B, FEMALE LATERAL VIEW. MAGNIFICATION: X 28

FIG. 5—CARNEGIEOMYSIS XENOPS, N. GEN. AND N. SP. A, ANTENNAL SCALE; B, ENDOPOD OF FIRST THORACIC LIMB; C, ENDOPOD OF SECOND THORACIC LIMB; D, ENDOPOD OF THIRD THORACIC LIMB; E, LAST THORACIC LIMB; F, TELSON. MAGNIFICATION: A-E, X 36; F, X 130